In the Claims:

1. (Currently amended) A process for the fabrication of isolation structures with the following process steps

provision of a semiconductor substrate (11),

forming of at least two trenches (12) spaced from each other in the semiconductor substrate (11) with at least one rib (13) ~~positioned~~ remaining entirely between the trenches (12),

conversion of the substrate material in the area of the trenches (12) into an electrically insulating material (14) ~~up to the~~ comprising complete conversion of the entire rib or the ribs (13), and ~~arranged between them,~~

forming of a functional structure (15) within the substrate material which functional structure is mechanically connected with the substrate exclusively by ~~means of~~ the converted substrate material which is formed at the trenches.

2. (Previously presented) A process according to claim 1, characterized in that silicon is used as semiconductor substrate.

3. (Previously presented) A process according to claim 2, characterized in that the substrate material is converted by means of thermal oxidation.

Claims 4 to 6 (Canceled).

7. (Currently amended) A process according to claim 1, characterized in that a continuous insulating oxide structure (14) ~~over longer distances~~ is created by ~~means of~~ a continuous arrangement of trenches (12) and ribs (13) between them.

8. (Currently amended) A process according to claim 1, characterized in that ~~with greater widths of the ribs (13),~~ the process step of conversion is a multi-step process.

9. (Previously presented) A process according to claim 8, characterized in that after a first process step of the conversion, the so created converted material is removed and thereafter the remaining material is converted in a second process step of the conversion.

10. (New) A method of fabricating a device including a micromechanical functional structure comprising:

a) providing a substrate of a semiconductor material;

b) forming, in said substrate, plural trenches including first and second trenches spaced apart from each other with a rib of said semiconductor material remaining between said first and second trenches;

c) forming an electrically insulating structure between said first and second trenches and extending continuously along at least one side of said trenches by converting said semiconductor material in said rib and along said at least one side of said trenches to an insulating material, including completely converting all of said semiconductor material of said rib to said insulating material;

d) forming a micromechanical functional structure in an additional trench in said substrate adjacent to said insulating structure, such that said insulating structure extends between said additional trench and said first and second trenches, said insulating structure extends to a depth into said substrate greater than a depth of said micromechanical functional structure, and a portion of said micromechanical functional structure is mechanically connected to said insulating structure and via said insulating structure to said substrate; and

e) etching around and under said micromechanical functional structure such that said micromechanical functional structure is mechanically connected with said substrate exclusively by said insulating structure, whereby said micromechanical functional structure is also electrically insulated from said substrate.

11. (New) The method according to claim 10, wherein said step a) comprises providing said substrate being of silicon as said semiconductor material.

12. (New) The method according to claim 10, wherein said converting of said semiconductor material to said insulating material comprises thermal oxidation of said semiconductor material to form an oxide material as said insulating material.

13. (New) The method according to claim 10, wherein said step b) of forming said plural trenches includes forming additional trenches in addition to said first and second trenches, such that said plural trenches are arranged in a row with a respective one of said rib of said semiconductor material remaining respectively between successive ones of said trenches, and said step c) is carried out such that said insulating structure extends continuously along said at least one side of all of said trenches.

14. (New) The method according to claim 10, wherein said converting of said semiconductor material in said step c) comprises a multi-stage conversion in order to completely convert all of said semiconductor material of said rib to said insulating material.

15. (New) The method according to claim 14, wherein said multi-stage conversion comprises a first conversion of some of said semiconductor material of said rib to a first amount of said insulating material, a step of removing said first amount of said insulating material, and thereafter a second conversion of a remainder of said semiconductor material of said rib to said insulating material.

16. (New) The method according to claim 10, wherein said rib has a thickness of less than 2 μm, wherein said converting of said semiconductor material in said rib in said step c) consists of a single thermal oxidation step that completely converts all of said semiconductor material of said rib to said insulating material.

17. (New) The method according to claim 10, wherein said trenches and said micromechanical functional structure are each respectively located and configured so that said micromechanical functional structure extends longitudinally aligned with said rib and is longitudinally displaced from said rib with a portion of said insulating structure therebetween.

18. (New) The method according to claim 17, wherein said trenches and said micromechanical functional structure are each respectively located and configured so that said first

and second trenches and said micromechanical functional structure together form a T-shape.

19. (New) The method according to claim 10, further comprising a step of providing a metallic strip running longitudinally along said rib on said insulating structure, and extending onto and electrically contacting said micromechanical functional structure.

20. (New) The method according to claim 10, wherein said rib includes all material between said first and second trenches.